ABSTRACT OF THE DISCLOSURE

The invention relates to the determination of the genomic structure of *HERG* which is a gene associated with long QT syndrome. The sequences of the 15 intron/exon junctions has been determined and this information is useful in devising primers for amplifying and sequencing across all of the exons of the gene. This is useful for determining the presence or absence of mutations which are known to cause long QT syndrome. Also disclosed are many new mutations in *HERG* which have been found to be associated with long QT syndrome.